

Work Order ID 75003

75003

Friday, October 14, 2011 3:24:39 PM

Page 1

Item ID: D350-636-017

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Skidtube w/ Training Wearplates, LH

Stop *NS2*

Start Date: 10/17/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/3/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MF

Date: 11-10-14 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3492

IIN-D350-636

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-017 CHG 002

Sublets

for MLI 11-10-24

Dart Aerospace Ltd .

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750

3- Drill pilot holes for blade fitting bolt holes using DT8983..Open to 0.500", deburr.

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details).Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE

8-Open up holes for Detail B to 0.375" (4 holes per side)and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750 .Open up holes for ground handling and detail C to 0.500" (8 holes per side)

9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".

10-Open up holes of Detail A to 0.297" (total of 2 holes per side)

11/10/17

Dart Aerospace Ltd

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Stop ***NR2***

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11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left
from bending as per QSI 004

A/R Aluminum Rod batch: *M118736*

12-Grind welds flush as per Dwg D2750

120

120

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds 0.00

Memo

0.00

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O 0.00

Memo

0.00

S u l o l e s

S u l o l e s

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

 11/10/18

150

QC3- Inspect Part Finish

0.00


150

QC

Memo

0.00

Quality Control

 11-10-18

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00

160

Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D2750.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750
(welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291 batch: 118393

Time 6:00

exp. date: 12-05-05

SAD - 11-10-18

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 8)

A/R Aluminum Rod batch: M110736

BE 11/10/19

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

BE 11/10/19

10-Grind welds flush as per Dwg D2750

SAD 11-10-19

①

11/10/18

①

Dart Aerospace Ltd

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

12- C'bore section CJ-CJ

13- Deburr holes

170

QC10- Inspect visual per QSI004- ground welds

0.00

170

QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00

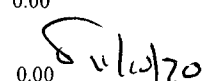
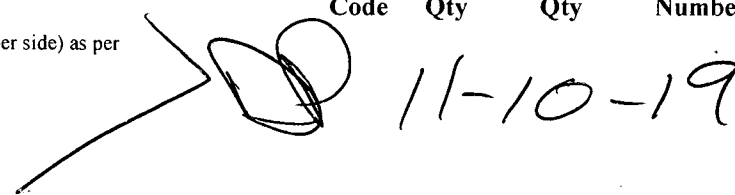
180

QC

Memo

0.00

Quality Control



Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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 Item Name: Skidtube w/ Training Wearplates, LH
 Start Date: 10/17/2011 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 11/3/2011 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190	Pressure Wash per QSI005 4.3	0.00							
190	HandFinish	0.00							
Hand Finishing	Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								

200	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
-----	--	------	--	--	--	--	--	--	--

200	Powdercoat	0.00							
Powder Coating	Memo START TIME: 11:15 OVEN TEMPERATURE: 320°F FINISH TIME: 11:45								

210	QC3- Inspect Part Finish	0.00							
-----	--------------------------	------	--	--	--	--	--	--	--

210	QC	0.00							
Quality Control	Memo Inspect for foreign object per QSI 024								

1 BR 11-10-20

1X CM 11/10/20

1 BR 11-10-20

M117745

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220

0.00

220

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1- Install inserts as per Dwg D2750

1 BL 11-10-20

230

0.00

230

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A.

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: 118393.EXP DATE: 10-5.

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 110348.5-Coat all exposed fasteners with "LPS Procyon" batch: 114396.

1 BL 11-10-21

Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	QC5- Inspect part completeness to step on W/O	0.00							
240 QC Quality Control	Memo	0.00	8/11/02/1			(X)			
250	Pick Kit	0.00							
250 Packaging Packaging	Memo	0.00							alok
260	QC4- 100% Inspect kits for completeness	0.00							
260 QC Quality Control	Memo *****ensure antiseize is on AN8C21A bolts*****	0.00	8/11/02/5			(u)			

Dart Aerospace Ltd

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
270									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-636-017								
	Location: <u>Draft</u>								
	PPP rev: _____								
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

11/10/25

11/10/25

11-10-25

Dart Aerospace Ltd

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Picklist Print

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Page 1

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Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC
DD verf:EC

IPP Rev:B 11.04.14 ecn11-553

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A BOLT		Purchased	No			230	Each	66.0000	1	1			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST352		20							
				117514		20							
				ST353		46							
				116075 ✓		42							
				118838		4							
AN3C36A BOLT		Purchased	No			230	Each	56.0000	4	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		14							
				101261		4							
				116590		10							
				ST353		42							
				119083		12							
				119125		30							
AN3C37A BOLT		Purchased	No			230	Each	114.0000	1	1			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST353		64							
				116874		11							
				117010		2							
				118518		51							
				ST354		50							
				118709		50							

BR 11-10-21

BR 11-10-21

11/10/21 & J

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Start Qty: 1.00

Required Qty: 1.00

AN3C42A Purchased No 230 Each 45.0000 1 1
BOLT 5

Location	Loc Qty	Loc Code
ST354	45	
106176	2	
117763	20	
118131	20	
118451	3	

D3490-1 Manufactured No 160 Each 54.0000 4 4
Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	52	
67773	5	
69823	6	
71841	41	
LG001	2	
62450	2	

D3490-3 Manufactured No 160 Each 46.0000 4 4
Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	46	
73295	46	

D3490-5 Manufactured No 230 Each 44.0000 4 4
Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG001	44	
46490	6	
59230	38	

BE 11/10/19

PART DOES NOT APPLY TO SKID TUBE.

BE 11/14/19

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Shop Packet Print

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Dart Aerospace Ltd

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Start Qty: 1.00

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D3492-1	Manufactured	No	230	Each	158.0000	8	8	<u>BR 11-10-21.</u>
Plug								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	158	
69531 ✓	8	
73402 ✓	70	
74444	80	

D3492-5	Manufactured	No	230	Each	48.0000	8	8	<u>BR 11-10-21.</u>
Plug								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	48	
69533 ✓	8	
70698	40	

D3873-1	Manufactured	No	230	Each	607.0000	7	7	<u>BR 11-10-21.</u>
Bushing								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST084	4	
68247	4	
ST088	603	
64760	1	
71837	27	
73829	203	
73831 ✓	372	

D4154-041	Manufactured	No	230	Each	4.0000	1	1	<u>BR 11-10-21.</u>
Wearplate Assembly								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	4	
71442 ✓	4	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 4

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

D4170-1
Bushings

Manufactured No

230 Each 44.0000 4 4

Location	Loc Qty	Loc Code
LG	40	
61581	1	
68225	1	
71844	38	
LG002	4	
65912	4	

BB 11/10/19

D4171-1
Bushings

Manufactured No

230 Each 10.0000 1 1

Location	Loc Qty	Loc Code
ST135	10	
69037	10	

BR 11-10-21

MS21043-3
Nut

Purchased No

230 Each 921.0000 5 5

Location	Loc Qty	Loc Code
FG	72	
103691	72	
ST301	849	
118077	1	
118614	492	
118686	356	

BR 11-10-21

NAS1149C0363R
Washer

Purchased No

230 Each 3,939.0000 9 9

Location	Loc Qty	Loc Code
ST297	3939	
114742	3939	

BR 11-10-21

NAS1149D0863J
WASHER

Purchased No

250 Each 130.0000 2 2

Location	Loc Qty	Loc Code
ST298	130	
118078	130	

2 11/10/24

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 5

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L Purchased No

230 Each 117.0000 4 4

WASHER

Location	Loc Qty	Loc Code
FG	40	
102472	40	
ST277	77	
113362	57	
118686✓	20	

BR 11-10-21

NAS1611-005 Purchased No

230 Each 160.0000 8 8

O-RING

Location	Loc Qty	Loc Code
FP002	160	
106099✓	55	
114220✓	105	

BR 11-10-21

NAS1611-010 Purchased No

230 Each 95.0000 8 8

O-RING

Location	Loc Qty	Loc Code
FP	81	
117460	8	
118077	1	
118612✓	72	
FP-A	14	
110915	14	

BR 11-10-21

D2744 Manufactured No

110 Each 66.0000 1 1

Cap

Location	Loc Qty	Loc Code
LG002	13	
62715	1	
70881	12	
WA	53	
71861	53	

BR 11/10/17

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 6

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured

No

110

Each

12.0000

Extrusion Bent

Location

Loc Qty

Loc Code

LG

12

66875

8

73253

4

D2743

Manufactured

No

160

Each

217.0000

Crossbolt Spacer

Location

Loc Qty

Loc Code

LG

159

71839

95

73403

64

LG001

58

67766

4

68251

54

D2739

Manufactured

No

160

Each

2.0000

350 I Beam

Location

Loc Qty

Loc Code

LG

2

72155

2

B72156

ALS4-1032-225

Purchased

No

230

Each

2,610.0000

Insert

Location

Loc Qty

Loc Code

ST282

2610

108696

758

110768

62

118386

860

118966

930

1 11/10/17

8 8 08/11/10/19

1 11-10-18

4 4 11-10-21

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 7

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C35A Purchased No

230 Each 113.0000 1 1

BR 11-10-21

Location	Loc Qty	Loc Code
FP	77	
117511 ✓	11	1
118286	66	
FP-A	1	
115960	1	
ST345	34	
117834	34	
ST346	1	
114442	0	
115188	0	
115960	1	

D3488-041 Blade Fitting Assembly, LH

Manufactured No

230 Each 18.0000 1 1

BR 11-10-21

Location	Loc Qty	Loc Code
FP	8	
69903 ✓	8	1
FP007	1	
61689	1	
FP008	9	
67788	1	
71887	8	

AN6C44A Purchased No

230 Each 113.0000 4 4

BR 11-10-21

Location	Loc Qty	Loc Code
FG	2	
103964	2	
ST344	111	
118387 ✓	41	4.
118985	40	
119125	30	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

230

Each

67.0000

1

1

NUT

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

6

118077 ✓

6

ST303

60

115884

0

118354

10

118614

50

D3631-1

Manufactured

No

230

Each

107.0000

8

8

Washer

Location

Loc Qty

Loc Code

ST072

107

68062 ✓

107

AN960C10L

* NAS1149C0332R ✓

Purchased

No

230

Each

0.0000

4

4

washer

118354.

D2745

Manufactured

No

230

Each

165.0000

8

8

Bushing

Location

Loc Qty

Loc Code

FP-A

3

69529 ✓

3

ST023

162

71835 ✓

162

NAS1149C0832R

Purchased

No

230

Each

345.0000

1

1

WASHER

Location

Loc Qty

Loc Code

FP-B

17

114915

17

ST297

328

114915

328

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 9

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C6A Purchased No

230 Each 232.0000 4 4

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP-A	1	
111982	1	
ST351	231	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422 ✓	176	

BR 11-10-21

MS21043-6 Purchased No

230 Each 505.0000 4 4

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST301	485	
112314 ✓	275	
117887	10	
118384	200	

BR 11-10-21

D3493-1 Washer Manufactured No

250 Each 55.0000 2 2

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST062	55	
70697	17	
71846	38	

11/10/21

2

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 10

Work Order ID: 75003

Parent Item: D350-636-017

Parent Item Name: Skidtube w/ Training Wearplates, LH

Start Date: 10/17/2011

Required Date: 11/3/2011

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

NUT

Purchased

No

250

Each

67.0000

2

2

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

6

113077

6

ST303

60

115884

0

118354

10

118614

50

AN8C21A

BOLT

Purchased

No

250

Each

69.0000

2

2

Location

Loc Qty

Loc Code

ST345

69

118045

19

118758

50

D2741

Blade, 350 Skidtube

Manufactured

No

250

Each

19.0000

1

1

Location

Loc Qty

Loc Code

ST466

19

70667

19

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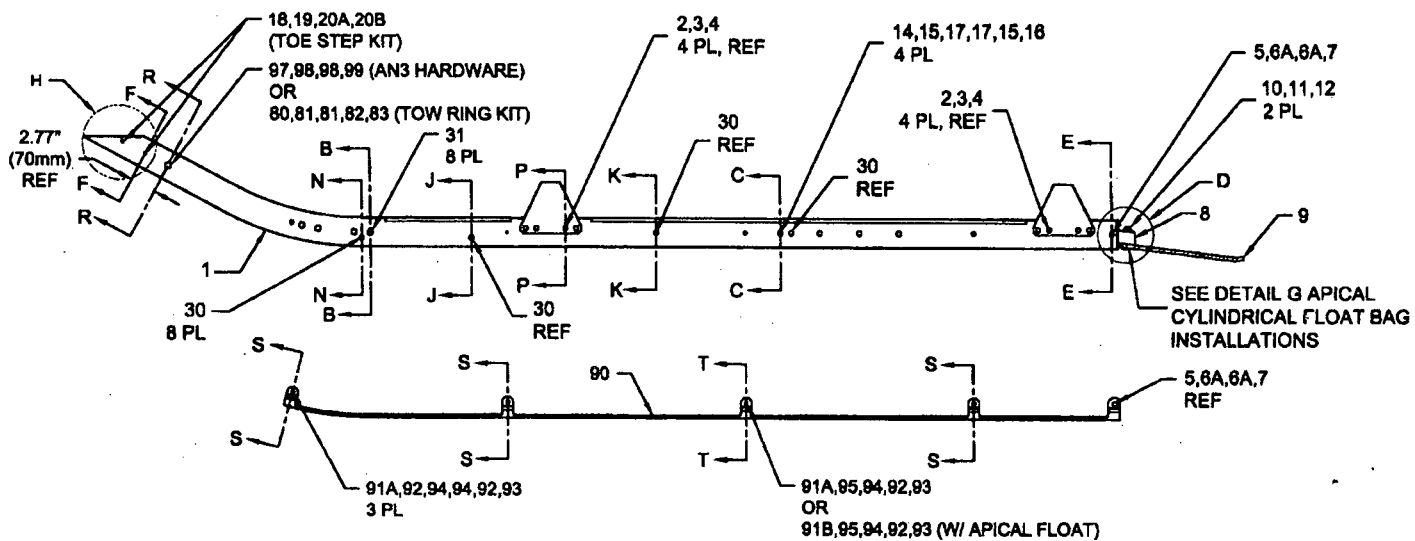
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

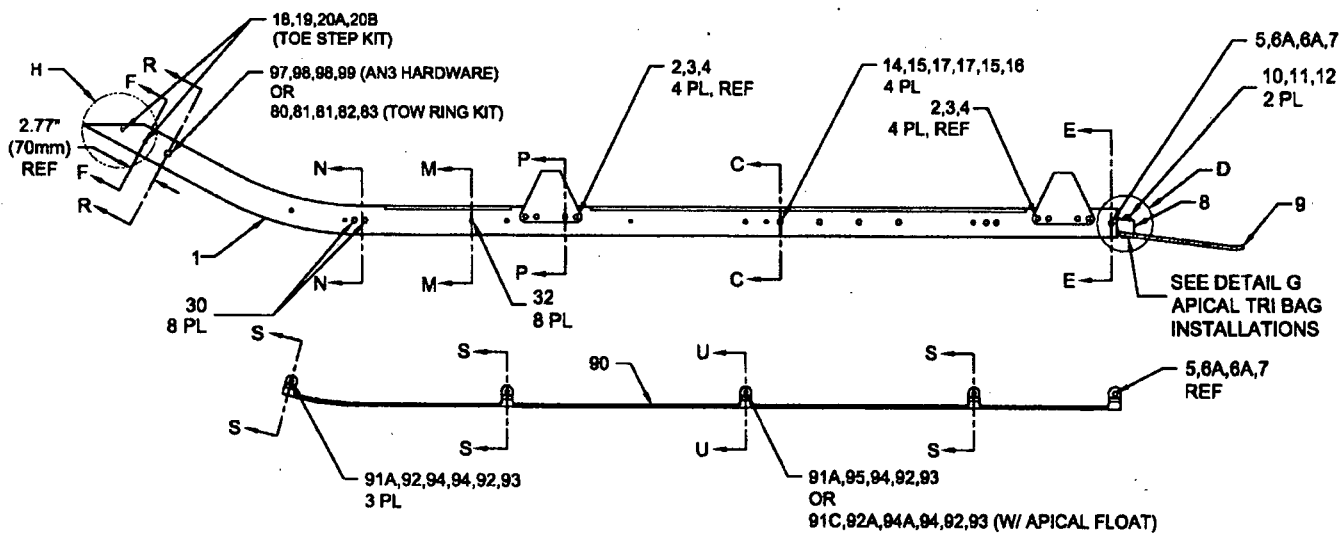
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D350-636-015/-016/-215/-216
(Aerazur/Apical Cylindrical)



D350-636-017/-018/-217/-218
(Aircruiser/Apical Tri-bag)

Figure 32-3: D350-636-015/-016/-017/-018/-215/-216/-217/-218
SKITUBE ASSEMBLY

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Revision: 2

32-00-00

#75007

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2800-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

RELEASED
2010-09-15

A NEW ISSUE		SC	10.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 1 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. NO DISSEMINATION OR REPRODUCTION OF THIS DOCUMENT IS PERMITTED WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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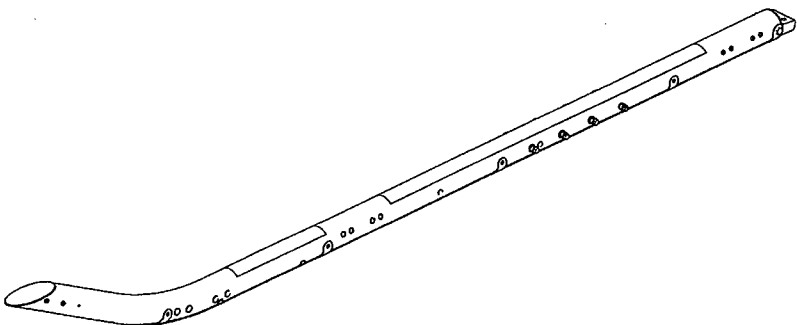
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

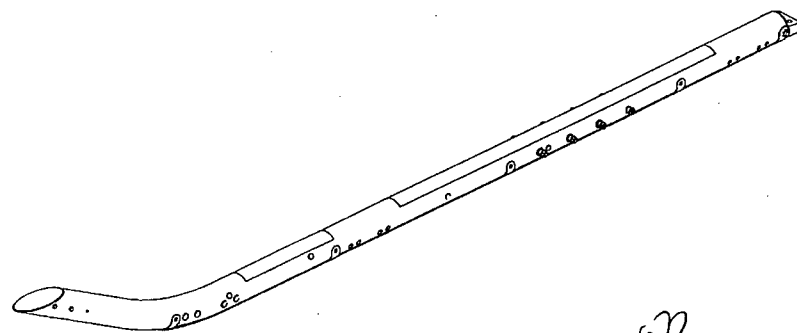
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D4168-041 350 SKIDTUBE ASSEMBLY, LH



D4168-042 350 SKIDTUBE ASSEMBLY, RH

75003

RELEASED
2010-09-15
JMT

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 2 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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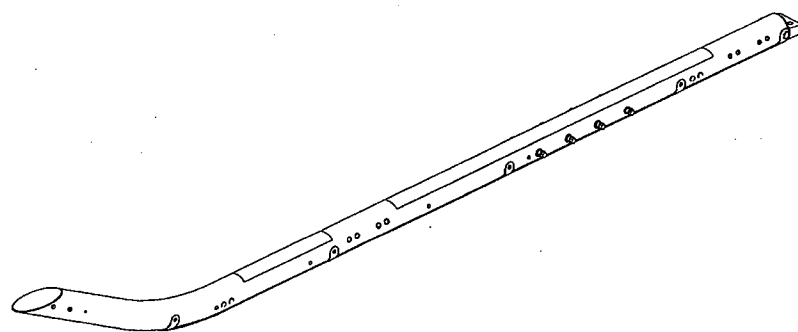
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

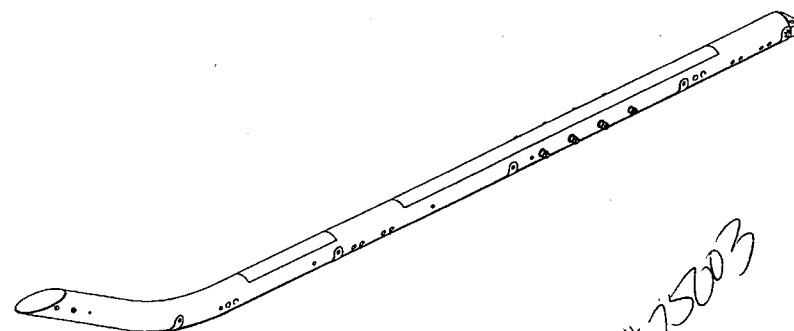
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D4168-043 350 SKIDTUBE ASSEMBLY, LH



D4168-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
2010-09-15

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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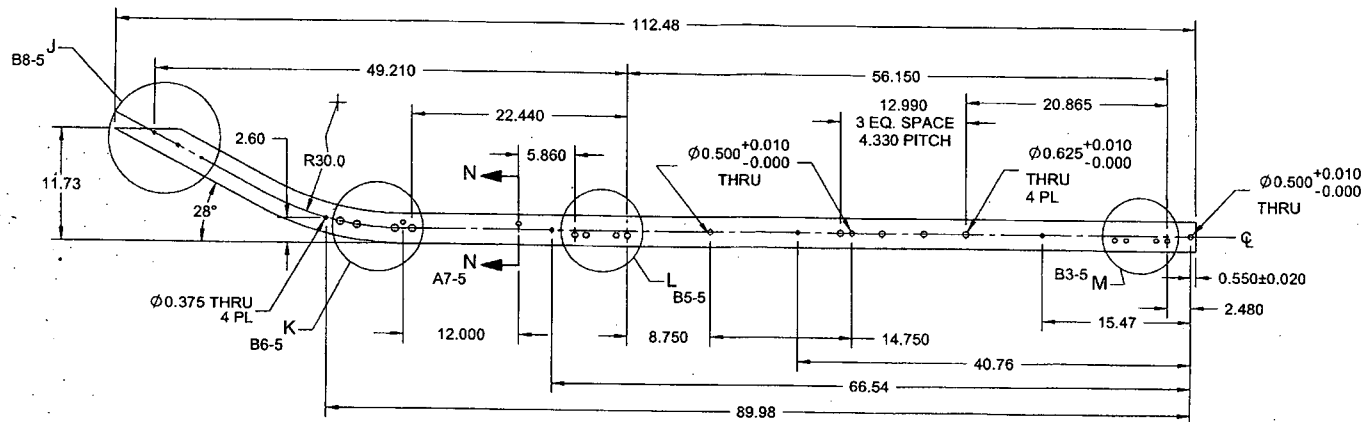
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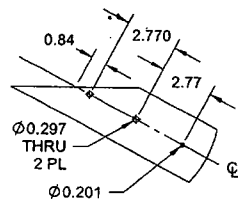
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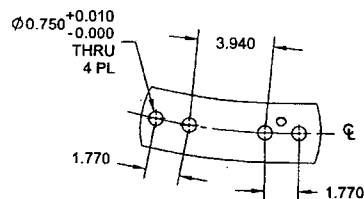


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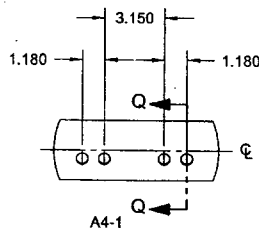
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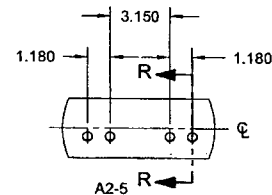
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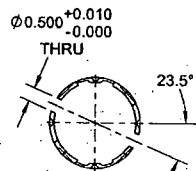
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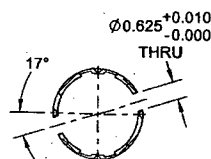
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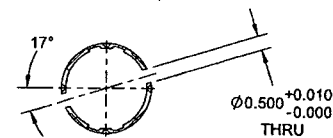
DETAIL M
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SECTION N-N
SCALE 3X, 2 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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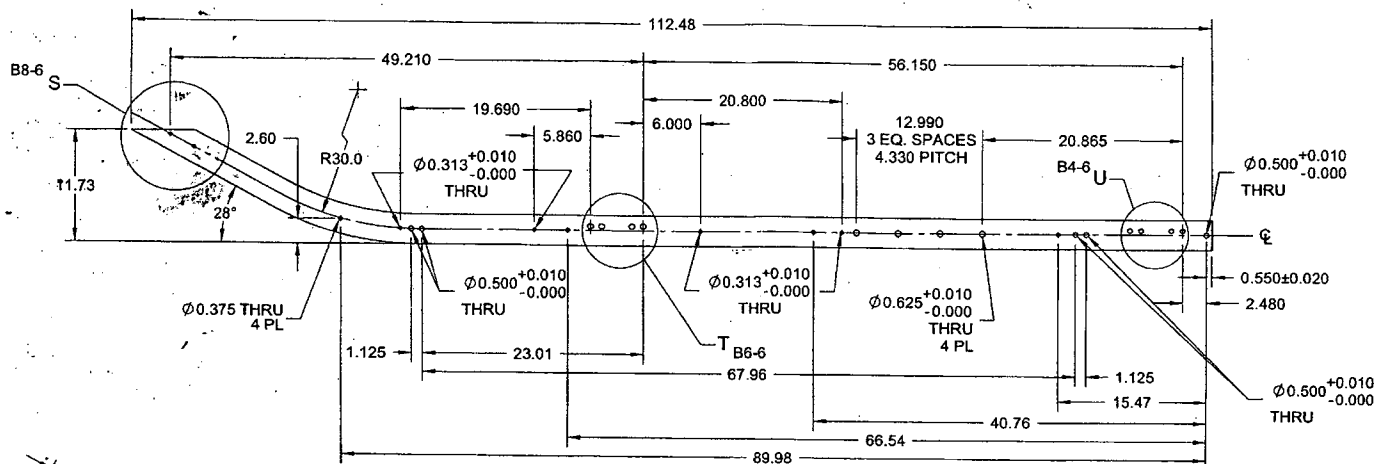
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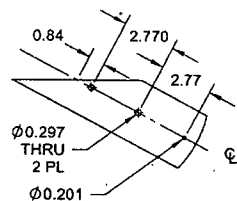
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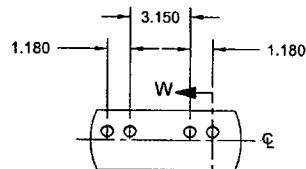
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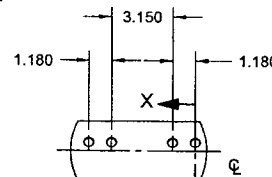
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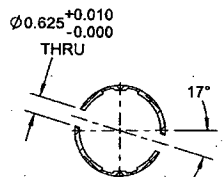
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D8-6
SCALE 2X



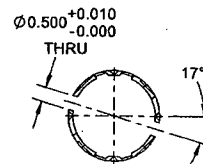
DETAIL T
C5-6
SCALE 2X



DETAIL U
D3-6
SCALE 2X



SECTION W-W
B6-6
SCALE 3X, 4 PL



SECTION X-X
B4-6
SCALE 3X, 4 PL

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NOTE: Date & initial all entries

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C

B

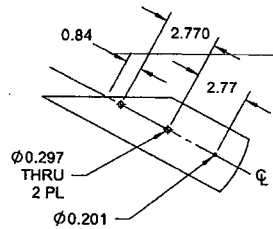
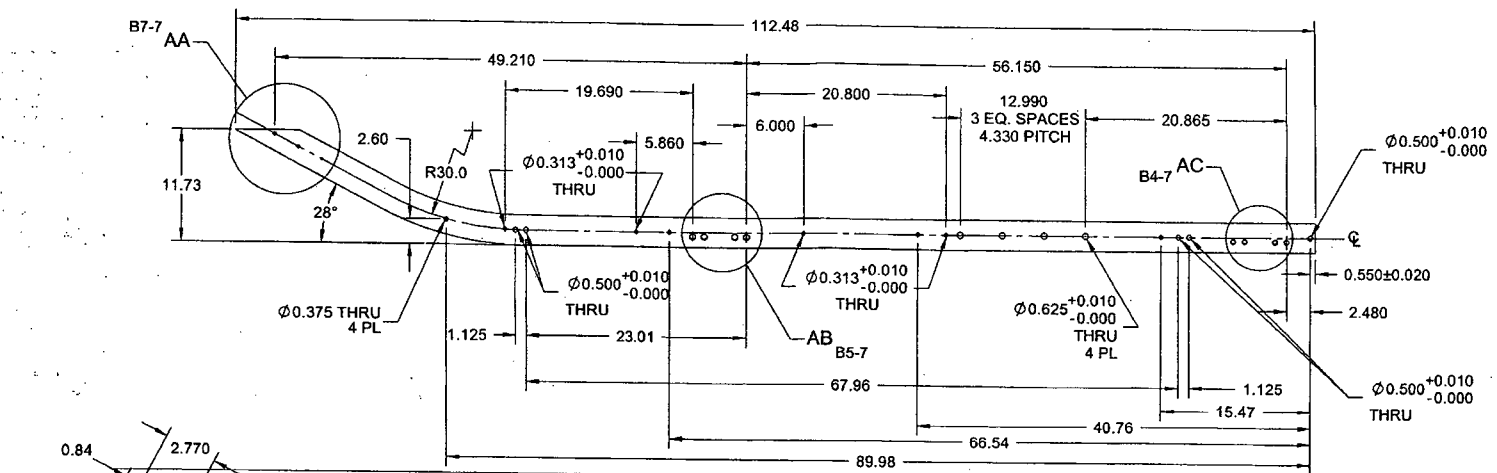
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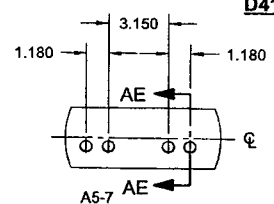
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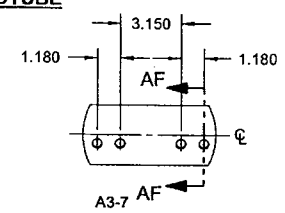
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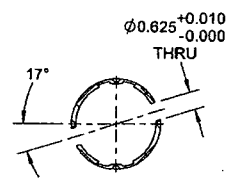
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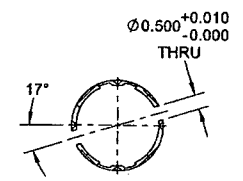
DETAIL AB
SCALE 2X



DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

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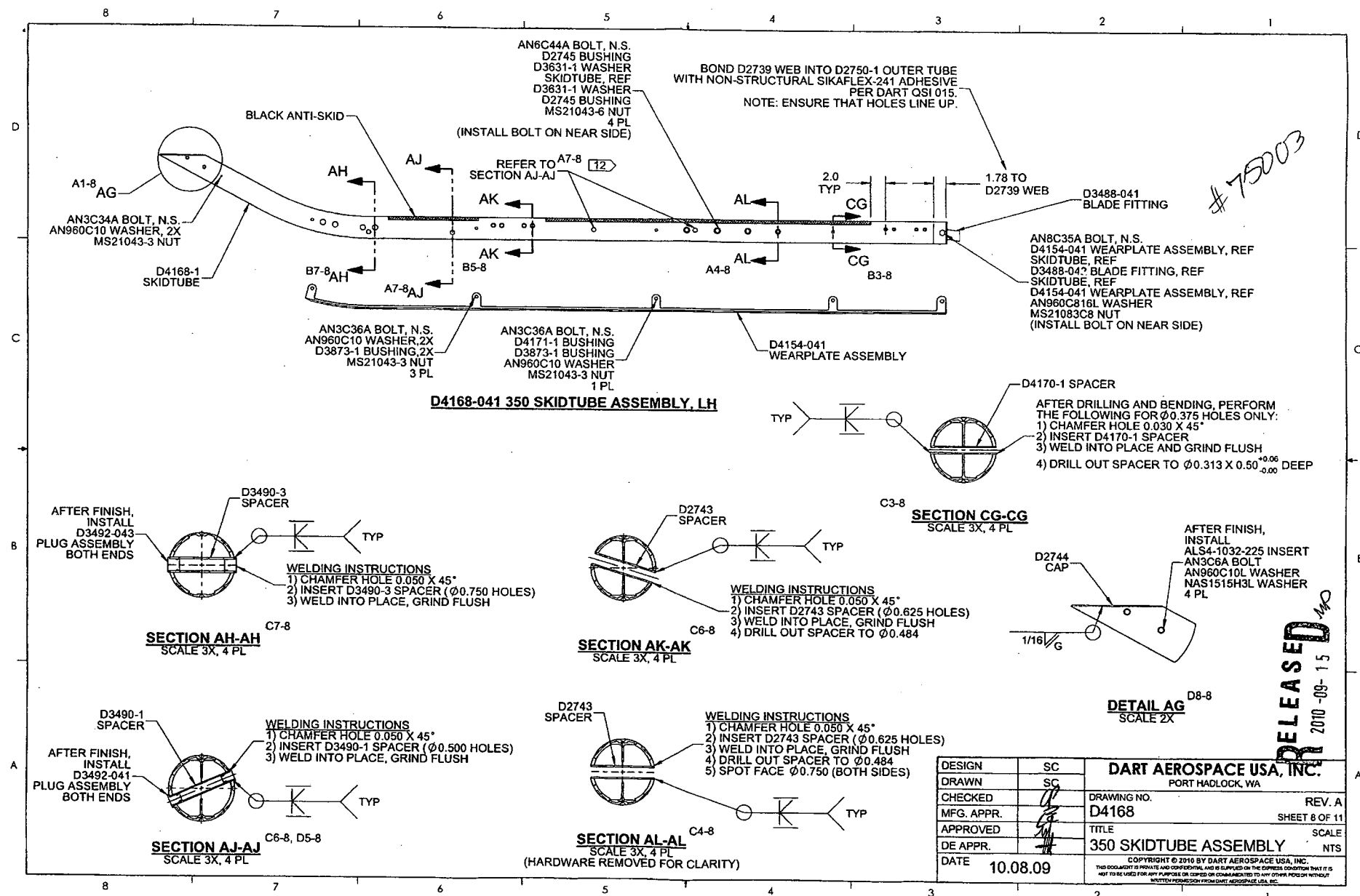
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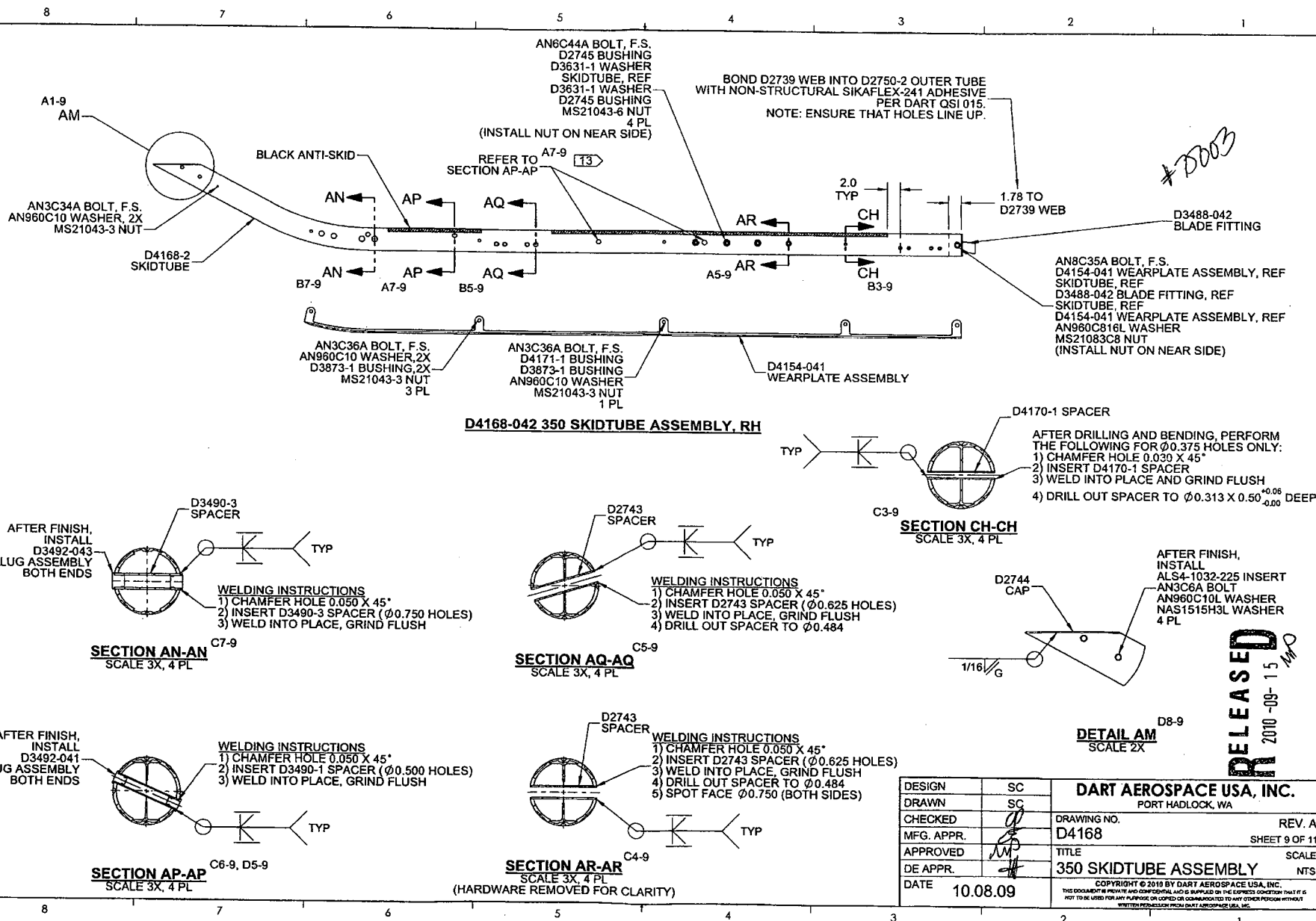
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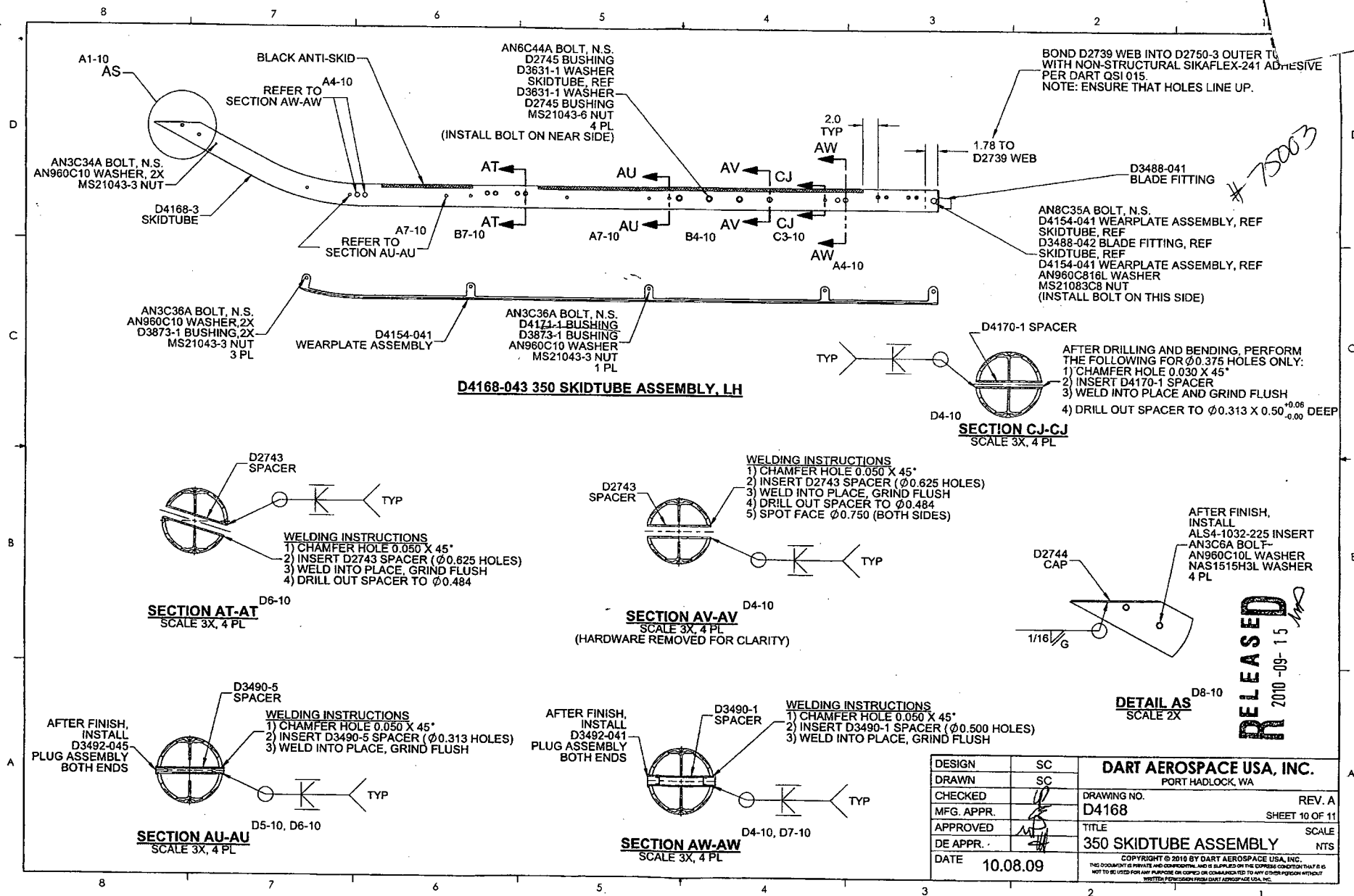
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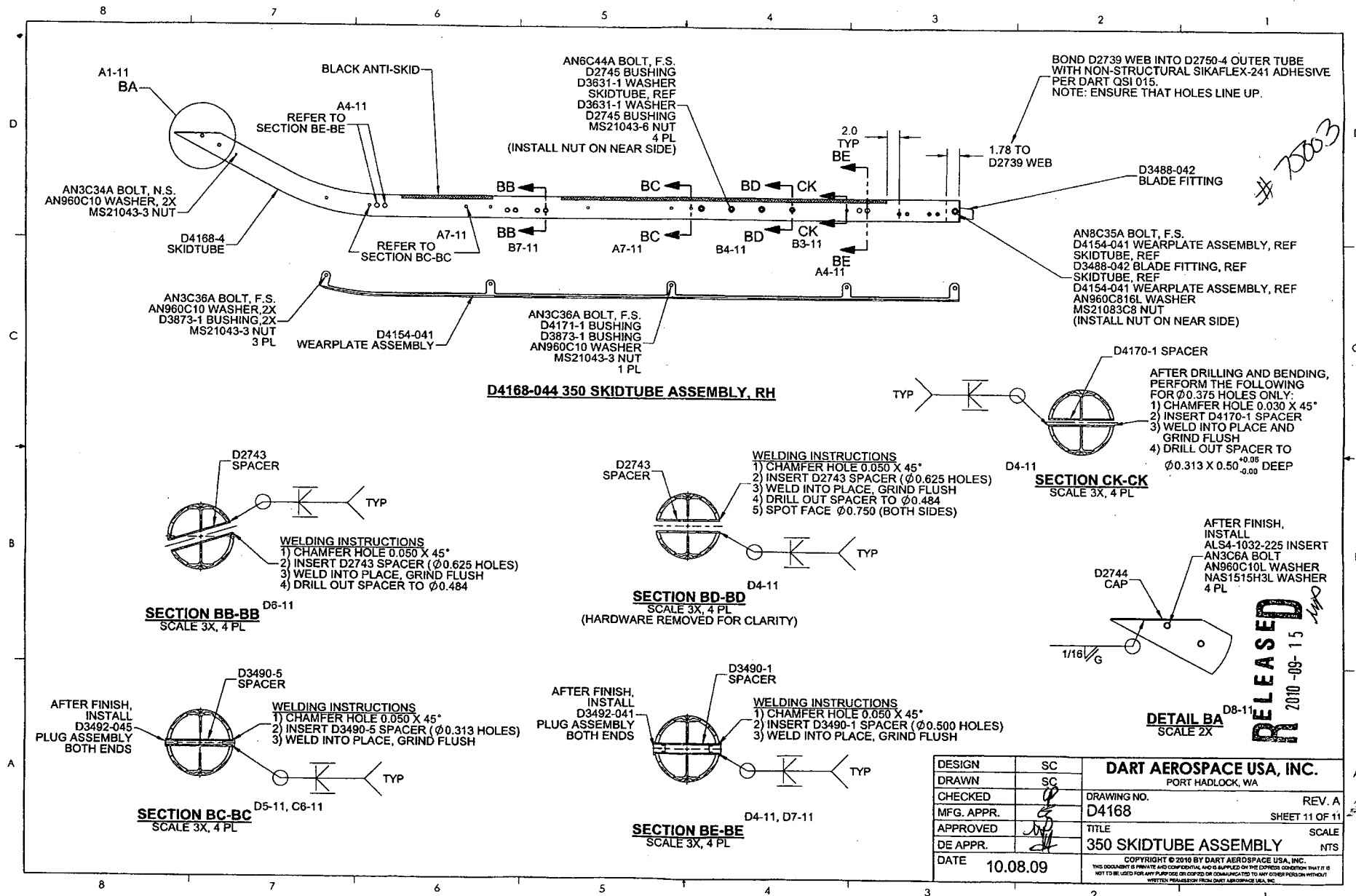
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NO. 270

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: B 72821
Part number: D 350 636 D12
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Alum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Dunn Date of Test Coupon 11-10-07
Welder Barclay Elliott Date of Test Coupon 11-10-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld